CHAPTER XI: Overview of NCCAM

Reasons People Choose CAM and Associated Research

We have some data from this survey and from other sources on why people turn to complementary and alternative medicine. One thing that's very consistent, whenever this has been looked at, is that alternative use, use instead of mainstream health practice, is actually quite rare. One investigator who looked at that is Bill Lasseter who uses databases that have been collected because of the coverage mandated in the state of Washington, and he looked at what patients are billing for, who have a diagnosis breast cancer, and very few people, a tiny number, who had a diagnosis of breast cancer and had bills submitted for complementary and alternative medicine essentially all of the people in that category also had bills submitted for conventional care. So we think that true alternative use instead of conventional healthcare is quite rare. This data consistent with that from several surveys particularly David Eisenberg's survey.

The mix of reasons that people cite for use of these health practices, a mix between health and well-being and treating specific health conditions. And this is the data on specific health conditions. Back pain and neck pain in every single survey have come out as the commonest reason why people turn to these practices. And other pain conditions: joint pain, arthritis, headache. So this, I think, reflects the reality that pain conditions, particularly back pain, is, in fact, very hard for conventional medicine to manage and people turn to other sources for solutions. I don't show the 2002 data here but there were some changes that are interesting in the pattern of use.

In this 2002 survey, colds was number 3 after neck pain and it fell as the reason people selected CCAM by about half between 2002 and 2007. Some of that, we think, may have been precipitated by studies NCCAM published, showing that Echinacea was not an efficacious treatment for colds, since that was the commonest herbal remedy used for colds. I'll tell you a little more about that. So NCCAM has invested very heavily in research on herbal medicines. And part of that investment has been in large phase 3 type trials for some of the most common dietary supplements. This list shows the commonest supplements in the 2002 survey. I want to take a minute to tell you what we've learned so far about some of them. Echinacea was studied by 2 large studies looking at both prevention of colds amelioration of cold symptoms. And both studies failed to document any benefit of Echinacea. And I think they were very well-performed studies. They had still left some lingering uncertainties, however.

Echinacea has been widely studied in Europe, and there are, in fact, a reasonable body of positive studies coming from both England and Germany. And one of the lingering uncertainties has involved the preparation of Echinacea. And whether in fact it was optimized for availability and so-on. So there's still a small question mark, but using a well-characterized preparation of benefits at this time.

The next agent that we've invested in on this list heavily, we have some basic work on ginseng, but not a lot of large studies, but we just finished, our investigators just completed a very large study on ginkgo-biloba for treatment of cognitive decline early Alzheimer's. And 2 major papers have come out of that. The latest was published in JAMA, 3 weeks ago. And this was a large study—3,000 patients, half on ginkgo, half on placebo, followed 5-7 years, with very careful cognitive function testing. And no difference was detected between the groups. The tiniest of difference actually went against the active agent, although it didn't achieve significance. There was also no difference in side effects. There's been concern that ginkgo causes increased bleeding-tendency. That did not show up in this study. There was no difference in the bleeding episodes. I consider this a very clear and well-done study, and I think we're very proud of it. The dataset that has been acquired will be publicly available to people interested in Alzheimer's research. It's the largest prevention trial of ginkgo of all type for cognitive kind ever done. So it represents incredibly rich dataset. But the hope for benefit for ginkgo was not found.

Work on garlic has been smaller studies. On glucosamine, this is the one area where the results in fact have been quite equivocal. There were 2 large studies on glucosamine for osteoarthritis in the knee. One, a functional study, and pain study and the other, a study using imaging methods to assess the knee cartilage. Neither achieved clear evidence of benefit, although, there were some hints and subgroups and everyone at the school of public health I'm sure is aware of the hazards of drawing conclusions from subgroups. But we still are considering glucosamine as something that might help. The effects, if there are any, seem to be modest.

Next is St. John's wort. St. John's wort is widely used for depression. And early in NCCAM's life, actually they completed a study on St. John's wort for major depression, which failed to document effects. One problem in that study was that the effect of Prozac, the active comparator was also minimal, as we're increasingly learning the treatment of depressants. And anti-depressives have much

more modest effect than I think some of us originally thought. St. John's wort is also an example where the benefit of the retrospectoscope, we really wish we'd known more about how it might work. It does look like St. John's wort, some of the components of St. John's wort, particularly a chemical called hyperphorin may have an SSRI-like effect, a Prozac-like effect. But the product that was used in this study was standardized for another component of St. John's Wort, hypericphorin. And so with the benefit of that knowledge, again, there's still a big question mark.

And finally, I wanted to mention fish oil and omega-3s. We, and other parts of the NIH, have invested fairly heavily in fish oil and omega-3 research. And this is actually an area where a number of positive findings have materialized. It is clear that omega-3s have a positive effect on triglicerides and certainly seem to be overall beneficial on cardiovascular risk factors, and at least in some of the systematic reviews, seem to have at least inferential evidence for effects on harder outcomes like cardiovascular events and mortality.